

IEP Science Highlights Directors' Meeting Update December 2016

IEP Lead Scientist background and near-term priorities

- Who Am I?
- Where did I come from?
- What's on my agenda?

Science Communication Highlights

- High Priority Items from the Science Enterprise Workshop, UC Davis, November 1-3, 2016
 - Interagency Modeling Collaboratory for enhanced bio-hydraulic capability and ecological forecasting
 - Social Science integration into traditional Natural Science venues
 - Continued periodic National gathering and information sharing
 - ➤ Legislative focus for creating regional estuarine/basin management
- Talks of Note from the 9th Biennial Bay-Delta Science Conference, Sacramento, November 15-17, 2016
 - Yolo Bypass/Knaggs Ranch as working landscape partnership (C. Jefferies, J. Katz, others)
 - Unusual 2016 Spring Bloom highlighting enhanced water quality monitoring and analysis (A. Mueller-Solger, B. Bergamaschi)
 - Unraveling sources and pathways of Se exposure in Wild Sacramento Splittail with spinal deformities (R. Johnson) and Regional Se Exposures of adult Sacramento Splittail in the San Francisco Estuary (R. Stewart)
 - Mechanisms for Effective Biological Control of the Invasive Water Hyacinth in the Sacramento-San Joaquin Delta (J. Hopper)
 - Measuring the delta as a Place: A Regional Opportunity Index and Economic Indicators (A. Kraus-Polk and B. Milligan)

IEP Ecological Performance Survey updates

- Delta Smelt FMWT index
 - November surveys captured 8 Delta Smelt total from 4 Lower Sacramento stations near Decker Island and Sherman Island on the same day
 - 2016 FMWT will be NON-ZERO, but will remain at near-zero record low Fall Index
 - Spring Kodiak Trawls began December 6, 2016.
- Winter-run Chinook salmon Red Bluff Diversion Dam Rotary Screw Trap
 - Surveys indicate similar adult numbers to, but increased egg to fry survival, over those surveyed in 2015

The Interagency Ecological Program for the San Francisco Estuary



- Bay Study was able to complete four surveys in 2016, with complications arising from catastrophic engine failure on the RV Longfin. An IEP Fleet Team Meeting was held on December 1, 2016 to address fleet resiliency and to establish a more robust IEP fleet.
- The relative abundance of legally-harvestable white sturgeon varies cyclically, and has been declining trend-wise for approximately 30 years. There have been near record lows since shortly after the last strong cohort recruited to the fishery nearly 10 years ago, and 2016 was the lowest on record. Green sturgeon recruitment trends are probably similar to white sturgeon recruitment trends, but the status of green sturgeon is much less certain. Luckily, the fishery on green sturgeon has been closed since 2006.

New IEP Project Work Team update

 Flow Alteration Project Work Team stand-up and articulation with CAMT Flow Subgroup for smelt resiliency actions